

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants : Dr. Günter HALMSCHLAGER et al. Group Art Unit: 1731
Appln. No. : 09/646,119 Examiner: J. Fortuna
Filed : January 21, 2000
§ 371 Date : October 30, 2000
For : MACHINE AND PROCESS FOR PRODUCING A MULTI-LAYERED
FIBROUS WEB

REPLY BRIEF UNDER 37 C.F.R. 41.41(a)(1)

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Sir:

This Reply Brief is in response to the Examiner's Answer dated November 29, 2007, the period for reply extending until January 29, 2008.

In the Examiner's Answer, the Examiner has maintained the grounds of rejection advanced in the final rejection and provides arguments in support thereof.

Appellant notes that this Reply Brief is being filed under 37 C.F.R. 41.41(a)(1) and is directed to the arguments presented in the Examiner's Answer, and is therefore must be entered unless the final rejection is withdrawn in response to the instant Reply Brief. With regard to this Reply Brief, Appellant is addressing points made in the Examiner's Answer and not simply repeating the arguments set forth in the Appeal Brief.

POINTS OF ARGUMENT

1. Turner Fails to Disclose or Teach at Least Two Layers in which Each Layer has a Higher Content of Fines on One Side

In contrast to the claimed invention, which recites, *inter alia*, at least two layers in which *each layer has a higher content of fines on one side* respectively, as recited in at least independent claims 46, 53, and 75, Appellants note TURNER merely discloses ply bonding affinity can be improved when more fines than filler are at the bonding surface. In particular, Appellants note TURNER's discussion of the prior art recognizes that fines, rather than fillers, promote bonding, see col. 1, lines 12 - 18:

Such ply bonding deficiencies can be generally attributed to decreased affinity between webs which have lower fines content in their mating faces. Also, especially where either or both of the mating plies contain an abundance of fines, which promote ply bonding, excessive speed in the rate of water removal through the faces of the plies to be mated adversely affects ply bonding because it tends to draw a greater amount of fillers to the surface. Fillers do not enhance ply bonding.

(TURNER, col. 1, lines 12 – 18).

Further, Appellants note TURNER, in accordance with his statement regarding the prior art discloses

Thus, by dewatering through *both surfaces of both the top and base plies*, formation of the individual plies is accomplished faster and, equally important, the ply faces which come into ply bonding engagement are better prepared, by virtue of having *more fines and less fillers at their surface*, to remain permanently bonded together

[emphasis added] (TURNER, col. 2, lines 12 – 18).

Thus, while TURNER recognizes that ply bonding is improved with more fines and less fillers at the bonding surface, TURNER fails to disclose the feature of Appellants' invention that for each layer, the fines content on one surface is greater than on the other surface. In fact, as

Appellants have shown throughout the prosecution of this application, TURNER teaches against the above-noted feature of Appellants' invention. In particular, TURNER discloses

The top ply is formed between two forming wires along a gently undulating path where the dewatering process is *carried out through both its faces* to produce a web which *has a more uniform distribution of fines, fillers and fibers on both its sides*, thus providing its surfaces with a greater affinity for ply bonding. This dewatering through both sides *not only produces a more uniform, one-sided web* (i.e. a web wherein *both sides are more nearly the same* after the dewatering process), but in addition, this degree of dewatering of the top ply is accomplished quickly so it can have a higher caliper and still be brought into ply bonding contact with the surface of the base ply which may be formed on an ordinary fourdrinier-type papermaking machine. Thus, this apparatus is especially suitable for use in modifying existing fourdrinier-type papermaking machines to produce composite, multi-ply board with little or no other modification necessary on the papermaking machine.

(col. 1, line 52 – col. 2, line 2).

Thus, Appellants submit, as TURNER expressly intends to produce a web having a uniform distribution of fines, fillers and fibers on both sides so both sides are more nearly the same after dewatering, there is no express or implied disclosure of each layer having a higher content of fines on one side, as recited in at least independent claims 46, 53, and 74.

Because the TURNER disclosure of uniform distribution of fines and both sides being nearly the same after dewatering, Appellants submit TURNER expressly teaches against Appellants' intentional higher content of fines on one side of each layer, as recited in the pending claims. As TURNER expressly teaches against the above-noted feature of Appellants' independent claims 46 and 74, Appellants submit this document cannot anticipate the invention recited in at least independent claims 46 and 74. Moreover, as TURNER expressly teaches against the above-noted feature of Appellants' claims, Appellants submit this document fails to render obvious Appellants' invention as recited in at least independent claims 46, 53, and 74.

Further, Appellants note the Examiner has not identified any articulated reasoning or rationale in TURNER (or any other document of record) that would render it obvious to modify TURNER in a manner contrary to its express disclosure.

Thus, Appellants submit, for at least the above-noted reasoning, the Examiner's assertions regarding the disclosure of TURNER are contrary to the express disclosure provided in the applied art, such that this reasoning cannot support the Examiner's rejections of anticipation under 35 U.S.C. § 102(b) and obviousness under 35 U.S.C. § 103(a). Therefore, Appellants request that the Board reverse the pending rejections and remand the application to the examining group for allowance.

2. *The Examiner's Assertions Regarding the Former of Turner are Contrary to the Turner's Express Disclosure*

In the bridging paragraph on pages 3 and 4 of the Examiner's Answer, the Examiner's assertions regarding the structure of TURNER are unsupported by the record. In this regard, referring to Fig. 1 of TURNER, the Examiner asserts since the dewatering starts at the bottom and then at the top, most of the fines would be at the top. The Examiner refers to the *Discussion of Background Information* section of Appellants' own disclosure in support of his assertion.

Contrary to the Examiner's assertions, TURNER expressly intends to create a web having a uniform distribution of fines, fillers and fibers so that, after dewatering, the web is nearly the same on both surfaces. Appellants note this express intended result of the TURNER invention is wholly contrary to the Examiner's assertion regarding the operation of TURNER's former illustrated in Fig. 1. Further, Appellants note TURNER fails to provide any disclosure or suggestion for modifying the twin wire former of Fig. 1 so as to operate in a manner wholly contrary to its intended operation, and certainly no disclosure to produce a layer having a higher fine content on one side.

As the Examiner's rejection is based at least in part upon this misinterpretation of Appellants' own disclosure, Appellants submit the pending rejections are improper and should be reversed.

As Appellants have maintained throughout prosecution of this application, no admission has been made by Appellants that merely forming a web on a single wire produces a higher content of fines on the unsupported side, nor have Appellants admitted that it is well known that the unsupported side contains the most fines due to less dewatering. Moreover, Appellants note the only support the Examiner finds for his interpretation of TURNER is Appellants' own disclosure.

While the "Background of the Invention" section of the Appellants' application identifies a number of known formers, this disclosure also sets forth specific action necessary to achieve a concentration of fines at a particular side of the web, Appellants have made no representations that this information is prior art. Moreover, while a Fourdrinier former is discussed, the background discussion is not an admission that the concentration of fines at the upper side achieved *with power pulses* was known to those ordinarily skilled in art at the time of the invention.

In any event, purportedly based upon the *Discussion of Background Information* section of Appellants' own disclosure, the Examiner asserts "it is well known that Fourdrinier formers have greater concentration of fines at the air side." However, Appellants note the identified passage of their disclosure does not support the Examiner's assertions. Appellants' *Discussion of Background Information* section merely provides that "in a Fourdrinier former, the dewatering occurs at the wire side," and that a "concentration of fines occurs at the upper side is achieved with power pulses." [emphasis added].

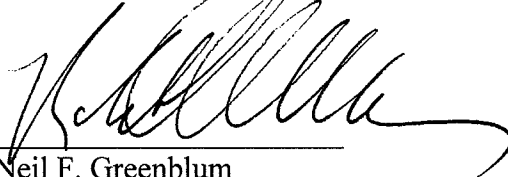
Thus, contrary to the Examiner's assertions regarding Appellants' purported disclosure, Appellants' discussion does not support the Examiner's asserted understanding that wire side dewatering alone results in a higher fines content for the formed web on the top side. As the Examiner's rejection is based at least in part upon this misinterpretation of Appellants' own disclosure, Appellants submit the pending rejections are improper and should be reversed.

Appellants further note, while the Examiner refers to Appellants' *Discussion of Background Information* section, see page 8, section 10 (*Response to Argument*), the Examiner has not identified any specific teaching or rationale for modifying TURNER in a manner that would contradict the express disclosure of TURNER. As the applied art expressly teaches against Appellants' claimed invention, Appellants submit the rejection of anticipation under 35 U.S.C. § 102(b) and obviousness under 35 U.S.C. § 103(a) are improper and should be reversed and remanded to the examining group for allowance.

CONCLUSION

For the reasons expressed above, Appellant respectfully requests that the grounds of rejection advanced by the Examiner be reversed. Appellants further request that the application be returned to the Examining Group for prompt allowance.

Respectfully Submitted,
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